

Agency Occupational Health Program Principal Center Office

Promoting NASA's Skin Cancer Prevention Program "Solar Safe" at NASA Centers

1. Program Overview

The majority of the NASA Centers are located in the Sunbelt. As a result, the NASA workforce is potentially at risk for developing some forms of skin cancer in greater numbers than normally expected as a result of excessive exposure to the sun.

The NASA Administrator would like to prevent suffering and death associated with skin cancer among NASA employees, and for the program developed by the Agency Occupational Health Program (OHP) to serve as a model for other Federal agencies. The goal of the newly initiated Solar Safe Program is to improve the health and safety of the workforce and maintain operational capabilities.

The metric established to measure the program effectiveness is to detect and reduce the occurrence and death from new skin cancers by ten percent in the next five years. To achieve this the Program will utilize modern technology, administrative controls, increased education and awareness, and intensive medical surveillance. The Solar Safe Program will provide a standardized and comprehensive approach to skin cancer prevention for all NASA Centers.

2. Scope

The Program is applicable to civil service personnel at all NASA Centers. NASA contractors may choose to participate with the concurrence of their contract management and NASA Contracting Officers.

3. Health Education and Promotion

Beginning in 2000, OHP personnel at NASA Centers will begin implementation of the Solar Safe Program. Health promotion efforts will include increasing awareness of risks associated with excessive exposure to the sun, educating employees, and prevention.

Activities to increase awareness about skin cancer should be on going throughout the year. Health information can be provided using written materials such as posters, newsletters, brochures, pamphlets, bulletin boards or during health fairs. Electronic media such as electronic mail, Center newsletters and Web pages are also available. Health education at each Center should be focused on skin cancer and its prevention. Education sessions can include lectures, self-paced learning materials, or demonstrations. The following agencies are recommended for obtaining health education materials, speakers and support for program implementation.

- American Cancer Society
- American Academy of Dermatology
- American Public Health Association
- American Board of Preventive Medicine

The Agency OHP Principal Center Office (PCO) will provide the following materials to each NASA Center for use in implementing the Solar Safe Program.

- **It's about saving face...and more Skin Cancer** by Hope Publications.
- **Stop Look for Danger Signs** by the American Academy of Dermatology.
- **Skin Cancer: If You Can Spot It, You Can Stop It** by The Skin Cancer Foundation.
- **Sun Smart** (ultraviolet intensity cards) by Teraco.
- **NASA Solar Safe Posters.**

4. Skin Cancer Screening and Detection

Skin cancer screenings should be offered as part of the Solar Safe Program to reduce both personal and occupational risks. A physician on staff or a dermatologist from the local healthcare community can perform skin cancer screening examinations. At the time of examination, a referral list of skin cancer specialists should be available for those with suspected skin cancers.

Individuals under age 40 should have a skin examination by a physician every three years. Beginning at 40, skin-screening examinations by a physician should be offered yearly. Outdoor workers should be offered annual total body skin examinations. At the time of examination education should be provided to teach employees how to perform skin self-examination and they should be encouraged to perform them monthly.

5. Administrative and Protective Measures

Administrative controls should be considered to reduce the amount and duration of solar exposure and reduce the associated risk of developing skin cancer. Work activities outside may be avoidable (consistent with operational needs) from 1100 to 1300 hours. Avoiding outdoor work at these times reduces the risk of exposure from ultraviolet A and B. Encouraging flexibility in work schedules allows alternate times for individuals to exercise outdoors avoiding the 1100 to 1300 time period. Employees should be encouraged to wear long sleeves, full-length pants or nylons, sunglasses and brimmed caps or hats protection to protect themselves when engaging in outside activities.

The workforce will be provided UV sensitive cards to increase awareness of harmful radiation and quantify the level of exposure they are receiving. When it is not possible to avoid outside work, workers should be provided with "foreign legion" style hats or other headwear designed to cover the ears and neck. Their use will reduce exposure and risk of developing skin cancer and also maintain cooler body temperatures. NASA Centers

should provide sunscreen dispensers at appropriate locations for those involved in outside work activities and at fitness centers for those exercising outdoors.

6. Program Metrics

The Agency goal is to reduce the number of new skin cancers detected by 10 percent in 5 years using Fiscal Year 2000 as baseline. During the implementation of the Solar Safe Program in 2000, NASA Center OHP personnel will collect data and provide a summary to the PCO. The data should be collected and submitted separately for NASA civil servants and contractors. The following data elements would be helpful in determining the effectiveness of the Solar Safe Program:

Screenings

- 1) Total number of participants screened for skin cancer
- 2) Percent of total employee/contractor population reached
- 3) Total number of total body examinations performed
- 4) Number of dermatology referrals
 - a) New referrals
 - i) Number of referrals
 - ii) Type of cancer
 - iii) Case outcome, where known
 - b) Referrals to employee/contractor treating dermatologist
 - i) Number of referrals
 - ii) Type of cancer
 - iii) Case outcome, where known
- 5) Total number of new cancers detected
 - a) Non-melanomatous cancer
 - b) Malignant melanoma cancer

7. Resources

The following list of resources is provided to assist NASA Center OHP personnel in implementing the Solar Safe Program.

On-Line and Written Materials

Agency	Materials	Type	Online	Cost
American Academy of Dermatology 930 N. Meachum Road PO Box 4014 Schaumburg, IL 60168-4014 888-462-DERM www.aad.org/	Skin Cancer Updates: What is skin cancer? Skin savvy 1999 Sun Safe Tips www.aad.org/P_Frameset.html	Fact Sheets	Y	N
	Skin Cancer: Undeclared Epidemic The Sun & Your Skin	Booklets	N	Y
	STOP Look for Danger Signs	Bookmark	N	Y
American Academy of Family Physicians 8880 Ward Parkway Kansas City, MO 64114-2797 816-333-9700 www.aafp.org/hip/	Skin Cancer: Saving Your Skin From Sun Damage	Pamphlet	N	Y
	Skin Rashes & Other Changes: Self Care Flowcharts aafp.org/medguide/charts/topic45.html	Flowchart	Y	N
	How to Prevent Skin Cancer Aafp.org/patientsinfo/980915a.html	Fact Sheet	Y	N
American Cancer Society 800-ACS-2345 www.cancer.org	Facts on Skin Cancer	Brochure	N	Y
	It's Your Skin. Wear It Well!	Info Card	N	Y
	Why You Should Know About Melanoma www2.cancer.org/materials/home.cfm?NewSession=Y&CANCER_CD=51	Brochure	N	Y
American Institute for Cancer Research Washington, DC 20090-7167 800-843-8114 www.aicr.org	Reducing Your Risk of Skin Cancer	Pamphlet	N	N
American Medical Association	Preventing Skin Cancer www.ama-assn.org/insight/yourhlth/skin_ca/index.htm	Y Interactive	Y	N
	Detecting Skin Cancer www.ama-assn.org/insight/spec_con/patient/pat040.htm	Fact Sheet	Y	N
Federal Trade Commission 600 Pennsylvania Ave., NW Washington, DC 20580 877-382-4357 www.ftc.gov/	Sunscreens www.ftc.gov/bcp/coline/pubs/health/sun.htm	Fact Sheet	Y	N

On-Line and Written Materials (Continued)

Agency	Materials	Type	Online	Cost
Health Edco PO Box 21207 Waco, TX 76702-1207 800-299-3366, ext 295	Skin Cancer: The Bare Facts	Booklet	N	Y
Hope Publications 350 East Michigan Avenue, Suite 301 Kalamazoo, MI 49007-3851 616-343-0770	It's About Saving Face...and more Skin Cancer	Booklet	N	Y
Krames/Staywell 1100 Grundy Lane San Bruno, CA 94066-3030 800-333-3032 www.krames.com	Understanding Skin Cancer Skin Cancer A Guide to Skin Safety	Pamphlet Pamphlet Booklet	N	Y
Mayo Clinic www.mayohealth.org/	Skin Care: Keeping Your Skin Healthy At Any Age Screen Yourself for Melanoma: Early Diagnosis is Crucial Sun Protection: A Quick Guide to SPF www.mayohealth.org/mayo/common/htm/cancpg2.htm	Fact Sheets	Y	N
National Center for Chronic Disease Prevention and Health Promotion Mail Stop K64 4770 Buford Highway, NE Atlanta, GA 30341-3717 770-488-4751 770-488-4760 (fax) www.cdc.gov/nccdphd/	Preventing skin Cancer: The Nation's Most Common Cancer At-A-Glance 1999 www.cdc.gov/nccdphd/ If Your're Tanned, Your're Toast When You're in the Sun, Choose Your Cover Warning Label www.cdc.gov/nccdphd/ Choose Your Cover www.cdc.gov/nccdphd/	Booklet Posters Brochure	N	N
The Skin Cancer Foundation PO Box 561 New York, NY 10156 800-SKIN490 www.skincancer.org/	What You Need to Know About Skin Cancer More Than a Million: Squamous Cell & Basal Cell Carcinoma Melanoma Sun Safety www.skincancer.org/sunsafer/index.html	Fact Sheets	Y	N
U. S. General Services Administration	Seven Steps to Safer Sunning Sun, UV & You www.pueblo.gsa.gov/health.htm	Brochures	N	N

Protective Equipment Resources

Supplier	Product
Adverspecs, Inc. PO Box 11147 Pittsburgh, PA 15237 800-848-3007 412-367-9311 (fax)	Sun Smart UV Intensity Meter
Conney 800-356-9100	Sun Screen SPF 30 4 oz, 34 oz and Towelettes
Fisher Safety Orlando, FL 800-772-6733	Sun Screen Towelettes SPF 15
Lab Safety Supply PO Box 1368 Janesville, WI 800-356-0783	Sun Sense Sunscreen SPF 15 Towellettes
Lifestyle Store 10180 "T" Ave Hesperia, CA 92345 800-900-6463 www.lifestylestore.com	Foreign legion style hat
North Safety Products 2000 Planfield Pike Cranston, RI 02921 800-430-4110 www.northsafety.com	Sun Sense Towelettes SPF 15 Boxes of 50
P.O.P Hats www.pophats.com	Angler Hat
Positive Promotions 40-01 168 th Street Flushing, NY 11358	Sunblock Pocket Packs Single Application
Rocky Mountain Sunscreen 12100 W 52 nd Ave. Unit 120 Wheatridge, CO 80033 303-940-9803 www.rmsunscreen.com	Sunscreen Gallon Pump Dispenser Available in SPF 15 & 30
Space Coast Promotions 1325 N. Atlantic Ave., Suite 160 Cocoa Beach, FL 32931 407-784-1818 407-784-3303	Sun Smart UV Intensity Meter